

ABSTRACT OF THE DISCLOSURE

The invention is a method for using mobile code such as an applet to conduct quality of service measurements of network paths in client applications such as web browsers. A client computer downloads the mobile code from a base server as well as a list of target host URLs from the base server. When executed, the mobile code accesses each of the target URLs and measures quality of service (QoS) data such as round-trip time, delays, loss of packets, etc. for each URL. The mobile code compiles this QoS data and transmits it back to the base server for processing and analysis. The base server may then transmit a second set of target URLs, which set may be generated randomly, previously selected, or selected based upon the QoS data received from the mobile code. In addition, the client may use the QoS measurements to determine which of the target URLs represents the better or best path of communications for the client, and may re-establish communications over that path accordingly. When many clients retrieve and run the mobile code and send QoS results back to the base server, the base server will eventually compile a comprehensive set of QoS statistics for widespread Internet traffic in a cost-effective and efficient manner.